

TEXT IN THE FIGURES

FIG. 1

PATTERN FORMING APPARATUS 10

MASK FORMING UNIT 100

5       HYDROPHOBIC PROCESSING UNIT 200

PATTERN MATERIAL SUPPLY UNIT 300

MASK REMOVAL UNIT 400

PATTERN MATERIAL SETTING UNIT 500

10       FIG. 5

MASK FORMING UNIT 150

PATTERN MATERIAL SUPPLY UNIT 200

MASK REMOVAL UNIT 400

PATTERN MATERIAL SETTING UNIT 500

15

FIG. 7

S100 MASK FORMING PROCESS

HYDROPHOBIC MASK

S101 MASK HYDROPHOBIC PROCESS

20       S102 PATTERN MATERIAL SUPPLY PROCESS

S103 ADHERENT LIQUID REMOVAL PROCESS

S104 PATTERN MATERIAL DRYING PROCESS

S105 MASK REMOVAL PROCESS

S106 PATTERN MATERIAL ANNEALING PROCESS

25

FIG. 8

S110 MASK FORMING

HYDROPHOBIC MASK

S111 MASK HYDROPHOBIC PROCESS

S112 PATTERN MATERIAL SUPPLY

SIMULTANEOUS DRYING

S113 PATTERN MATERIAL DRYING

5 S114 DRIED SOLID REMOVAL PROCESS

S115 MASK REMOVAL PROCESS

S116 PATTERN MATERIAL ANNEALING PROCESS

FIG. 9

10 S120 MASK FORMING PROCESS

HYDROPHOBIC MASK

S121 MASK HYDROPHOBIC PROCESS

S122 PATTERN MATERIAL SUPPLY PROCESS

S123 PATTERN MATERIAL DRYING PROCESS

15 S124 PATTERN MATERIAL ANNEALING PROCESS

S125 MASK REMOVAL PROCESS

FIG. 10

S130 MASK FORMING PROCESS

20 S131 MASK HYDROPHOBIC PROCESS

S132 PATTERN MATERIAL SUPPLY PROCESS

S133 MASK MATERIAL HEATING AND SOLIDIFYING PROCESS

FIG. 11

25 S140 MASK FORMING PROCESS

HYDROPHOBIC MASK

S141 MASK HYDROPHOBIC PROCESS

S142 PATTERN MATERIAL SUPPLY PROCESS

SIMULTANEOUS DRYING

S143 PATTERN MATERIAL DRYING PROCESS

S144 DRIED SOLID REMOVAL PROCESS

S145 PATTERN MATERIAL ANNEALING PROCESS

5 S146 MASK REMOVAL PROCESS

FIG. 12

S150 MASK FORMING PROCESS

HYDROPHOBIC MASK

10 S151 MASK HYDROPHOBIC PROCESS

S152 PATTERN MATERIAL SUPPLY PROCESS

S153 PATTERN MATERIAL DRYING PROCESS

S154 PATTERN MATERIAL ANNEALING PROCESS

S155 MASK REMOVAL PROCESS

15

FIG. 13

S160 WORKPIECE HYDROPHOBIC PROCESS

S161 PATTERN MATERIAL SUPPLY PROCESS

S162 ADHERENT LIQUID REMOVAL PROCESS

20 S163 PATTERN MATERIAL HEATING AND SOLIDIFYING PROCESS

FIG. 14

S170 WORKPIECE HYDROPHOBIC PROCESS

S171 PATTERN MATERIAL SUPPLY PROCESS

25 S172 ADHERENT LIQUID REMOVAL PROCESS

S173 PATTERN MATERIAL DRYING PROCESS

S174 PATTERN MATERIAL ANNEALING PROCESS

FIG. 15

S180 WORKPIECE HYDROPHOBIC PROCESS

S181 PATTERN MATERIAL SUPPLY PROCESS

S182 PATTERN MATERIAL HEATING AND SOLIDIFICATION

5 FIG. 16

S190 WORKPIECE HYDROPHOBIC PROCESS

S191 PATTERN MATERIAL SUPPLY PROCESS

S192 PATTERN MATERIAL DRYING PROCESS

S193 DRIED SOLID REMOVAL PROCESS

10 S194 PATTERN MATERIAL ANNEALING PROCESS

S193a SOLID MATERIAL REMOVAL PROCESS

FIG. 17

S200 MASK FORMING PROCESS

15 S201 WORKPIECE HYDROPHOBIC PROCESS

S202 PATTERN MATERIAL SUPPLY PROCESS

S203 ADHERENT MATERIAL REMOVAL PROCESS

S204 PATTERN MATERIAL DRYING PROCESS

S205 PATTERN MATERIAL ANNEALING PROCESS

20 S206 MASK REMOVAL PROCESS